CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/WNo.15/KRIDL/CEMENT/2014-15

Date: 09.07.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager (West),** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvements and Construction of cement concrete road & RCC culverts at Coconut Garden Passages in Dasarahalli Ward No. 15, BBMP, Bangalore.
REFERENCE	:	EE/DD/WO/114/2014-15 Dated: 30.06.2014
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-1989
1	a) Initial Setting Time	IS-4031 (Part -5)	185 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	465 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	25.50 %	-

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Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/WNo.15/KRIDL/SAND/2014-15 : 09.07.2014

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, Bangalore.

Name of Work : Improvements and Construction of cement concrete road & RCC culverts at Coconut Garden Passages in Dasarahalli Ward No. 15, BBMP, Bangalore.

Reference : EE/DD/WO/114/2014-15 Dated: 30.06.2014

Date of Testing : 09.07.2014

Material : Sand Total Wt. of Aggregates in gms 2000

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	85	4.25	4.25	95.8	90-100
2.36	234	11.70	15.95	84.1	75-100
1.18	429	21.45	37.40	62.6	55-90
600 Micron	524	26.20	63.60	36.4	35-59
300 Micron	477	23.85	87.45	12.6	8-30
150 Micron	168	8.40	95.85	4.1	0-10

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Job No.: CTCE/BBMP/WNo.15/KRIDL/AGG/2014-15 : 09.07.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.

Agency : **Technical Manager (West),** KRIDL, Bangalore.

Name of Work : Improvements and Construction of cement concrete road & RCC culverts at Coconut Garden Passages in Dasarahalli Ward No. 15, BBMP, Bangalore.

Reference : EE/DD/WO/114/2014-15 Dated: 30.06.2014

Date of Testing : 09.07.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms 25050

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	967	3.86	3.86	96.14	95-100
20	15254	60.89	64.75	35.25	30-70
10	5842	23.32	88.08	11.92	10-35
4.75	2389	9.54	97.61	2.39	0-5

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Job No.: CTCE/BBMP/WNo.15/KRIDL/STEEL/2014-14 14.07.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
Name of the Work	:	Improvements and Construction of cement concrete road & RCC culverts at Coconut Garden Passages in Dasarahalli Ward No. 15, BBMP, Bangalore.
Reference	:	EE/DD/WO/114/2014-15 Dated: 30.06.2014
Date of Test	:	14.07.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per meter (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	8	0.40	514	547	12.75	O.K	O.K

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Job No.: CTCE/BBMP/WNo.15/KRIDL/STEEL/2014-14 14.07.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
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Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per meter (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	10	0.62	515	549	12.90	O.K	O.K

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Date of Test	:	14.07.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm²	Tensile strength (Ultimate stress) N/mm²	Elongation percent gauge length		
1	12	0.89	518	552	13.10	O.K	O.K

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Job No.: CTCE/BBMP/WNo.15/KRIDL/CUBE/2014-15

14.08.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager (West),** KRIDL, Bangalore.
Name of the work	: Improvements and Construction of cement concrete road & RCC culverts at Coconut Garden Passages in Dasarahalli Ward No. 15, BBMP, Bangalore.
Reference	: EE/DD/WO/114/2014-15 Dated: 30.06.2014
Sample ID	: Cement Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	17.07.2014	14.08.2014	8.146	476.8	21.19
2	17.07.2014	14.08.2014	8.257	489.2	21.74
3	17.07.2014	14.08.2014	8.378	502.4	22.33

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20.08.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
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Name of the work	: Improvements and Construction of cement concrete road & RCC culverts at Coconut Garden Passages in Dasarahalli Ward No. 15, BBMP, Bangalore.
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Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	23.07.2014	20.08.2014	8.182	485.5	21.58
2	23.07.2014	20.08.2014	8.103	471.3	20.95
3	23.07.2014	20.08.2014	8.236	509.4	22.64

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